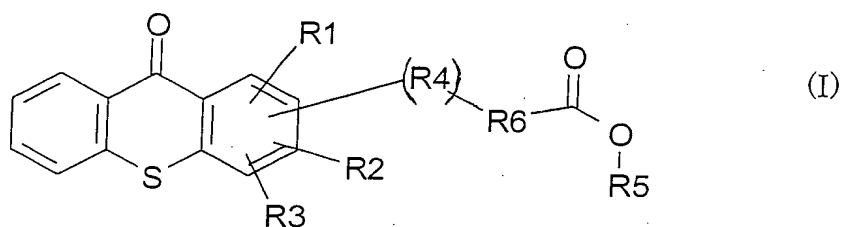


CLAIMS

1. A process for the production of thioxanthone derivatives of the general formula (I) given below:



where:

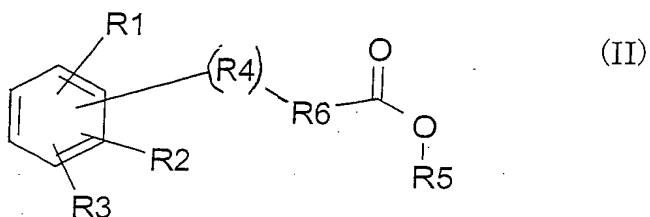
R<sub>1</sub>, R<sub>2</sub> and R<sub>2</sub> is hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> alkoxy, halogen, hydroxy or C<sub>1</sub>-C<sub>10</sub> dialkylamino; R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> being the same or different;

R<sub>4</sub> is oxygen, sulphur or absent;

R<sub>5</sub> is hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl or aryl; and

R<sub>6</sub> is a straight or branched alkyl chain having 0 to 10 carbon atoms;

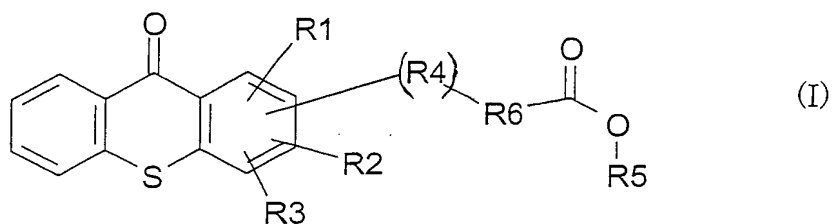
the one-step process comprising reacting a compound of the general formula (II) below with mercaptobenzoic acid or dithiobisbenzoic acid in the presence of sulphuric acid:



2. A process as claimed in claim 1, wherein  $R_6$  is  $-(CH_2)_n-$  in being 0 to 10.
3. A process as claimed in claim 1, wherein the compound of formula (II) is phenoxyacetic acid where  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_5$  are each hydrogen,  $R_4$  is oxygen and  $n$  is 1.
4. A process as claimed in claim 1, wherein  $R_6$  is  $-CH(CH_3)-$ .
5. A process as claimed in any one of claims 1 to 4, wherein the sulphuric acid is used in amounts 1 part to 20 parts by weight of acid to 1 part by weight of dithiobisbenzoic acid or mercaptobenzoic acid.
6. A process as claimed in claim 1, wherein the sulphuric acid has a concentration of equal to or greater than 90%.
7. A process as claimed in claim 1, wherein the molar ratios of dithiobisbenzoic acid or mercaptobenzoic acid to a compound of formula (II) are 1:1 to 1:5.
8. A process as claimed in claim 1 further comprising stirring the reactants to aid completion of the reaction.
9. A process as claimed in claim 1, wherein the temperature of the reaction is kept at  $0^\circ\text{C}$  to  $30^\circ\text{C}$  during addition of the reactants.
10. A process as claimed in claim 9, wherein the temperature is increased to  $30^\circ\text{C}$  to  $90^\circ\text{C}$  following addition of the reactants.
11. A process as claimed in claim 1 further comprising quenching the reactant mixture with excess water and filtering the solid product.

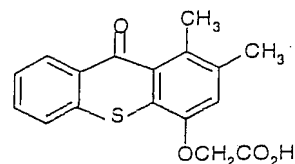
12. A process as claimed in claim 9, wherein water is added to dilute the acid strength to 20 – 50%.

13. A substituted thioxanthone of the general formula (I) below:

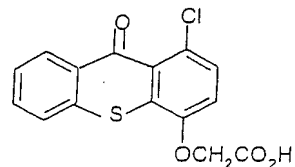


prepared according to the process of claim 1.

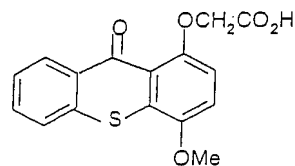
14. 1,2-Dimethyl-4-carboxymethoxythioxanthone,



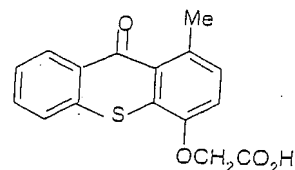
15. 1-Chloro-4-carboxymethoxythioxanthone,



16. 1-Carboxymethoxy-4-methoxythioxanthone,



17. 1-Methyl-4-carboxymethoxythioxanthone,



18.

2-(2-Methyl)-carboxymethoxythioxanthone,

